

WHAT IS CLAIMED IS:

1. A communication system comprising:

a plurality of relaying base stations continuously transmitting a data frame and a compressed data frame, the compressed data frame generated as a result of compressing said data frame as required for providing a period without data transmission; and

a mobile communication terminal comprising:

a transmitting and/or receiving means for transmitting and/or receiving actual data to/from said relaying base stations under a specific frequency;

a signal strength measuring means for measuring intensity of data signal transmitted from a relaying base station having a different frequency, by utilizing said period without data transmission generated by reception of said compressed data frames via said transmitting and/or receiving means;

a controlling means controlling frequency of data signal transmitted and received by said transmitting and/or receiving means based on a result of measurement by said signal strength measuring means, and then switching a relaying base station transmitting and/or receiving actual data;

a detecting means for detecting that said mobile communication terminal is in an approximately non-mobile condition; and

a non-mobile condition information transmitting means for transmitting via said transmitting and/or receiving means information on the approximately non-mobile condition detected by said detecting means to a relaying base station transmitting and/or receiving actual data; wherein

said relaying base station continuously transmits a data frame without providing said period without data transmission, based on the information on the approximately non-mobile condition from said mobile communication terminal.

2. The communication system according to Claim 1, wherein each of

said plurality of relaying base stations generates said compressed data frame from said data frame under a compressed mode.

3. The communication system according to Claim 1, wherein said non-mobile condition information transmitting means transmits information on the approximately non-mobile condition to said relaying base stations before starting transmission and/or reception of actual data.

4. The communication system according to Claim 1, further comprising an operating means for inputting external information on the approximately non-mobile condition, wherein said detecting means detects input of information on the approximately non-mobile condition, the input performed through said operating means.

5. The communication system according to Claim 1, wherein said detecting means detects a the approximately non-mobile condition by detecting that said communication terminal is loaded onto a fixing apparatus.

6. The communication system according to Claim 5, wherein said fixing apparatus comprises a station unit connected to a computer and transfers data between said loaded communication terminal and said computer, wherein said communication terminal can be freely attached/detached to/from said fixing apparatus.

7. The communication system according to Claim 1, wherein said communication terminal comprises a portable telephone set and said actual data comprises telephone call data.

8. A communication method comprising:
a transmitting step for continuously transmitting from a relaying base station a data frame and a compressed data frame generated by compressing said data frame as required for providing a period without data transmission ;

5 a signal strength measuring step for measuring intensity of data signal transmitted from a relaying base station having a different frequency, by utilizing said period without data transmission generated by reception of said compressed data frame via a transmitting and/or receiving means transmitting and receiving actual data to/from relaying base stations under a specific frequency; and

10 a base-station selecting step for controlling frequency of transmission and reception of said transmitting and/or receiving means of said communication terminal based on a measurement result of said signal strength measurement step and switching a relaying base station transmitting and/or receiving actual data; wherein

15 said communication terminal detects whether said communication terminal is on approximately non-mobile condition, and then transmits via said transmitting and/or receiving means information on said detected approximately non-mobile condition to said relaying base station transmitting and/or receiving actual data; and

20 said relaying base station continuously transmits data frames without providing said period without data transmission during said transmitting step, based on said information on the approximately non-mobile condition transmitted from said communication terminal.

9. A communication terminal transmitting and/or receiving data signal to and to/from a relaying base station from a plurality of relaying base stations, said relaying base station continuously transmitting a data frame and compressed data frame generated by compressing said data frame as required for providing a period without data transmission, the communication terminal comprising:

25 a transmitting and/or receiving means for transmitting and/or receiving actual data to and from said relaying base station under a specific frequency;

30 a signal strength measuring means for measuring strength of data signal from a neighboring relaying base station using a different frequency by utilizing said period without data transmission generated as a result of reception of said compressed data frame via said transmitting and/or receiving means;

a controlling means for controlling frequency of data signal from said transmitting and/or receiving means based on measurement result of said signal strength measuring means and switching relaying a base station transmitting and/or receiving actual data;

5 a detecting means for detecting an approximately non-mobile condition; and

a non-mobile condition information transmitting means transmitting via said transmitting and/or receiving means information on the approximately non-mobile condition detected by said detecting means to said relaying base station transmitting and/or receiving actual data; wherein

said relaying base station continuously transmits data frame without providing said period without data transmission, based on received information on the approximately non-mobile condition.

15 10. The communication terminal according to Claim 9, wherein said switched relaying base station generates said compressed data frame from said data frame by applying a compressed mode.

20 11. The communication terminal according to Claim 9, wherein said non-mobile condition information transmitting means transmits said information on the approximately non-mobile condition before starting transmission and/or reception of actual data.

25 12. The communication system according to Claim 9, further comprising an operating means for inputting external information on the approximately non-mobile condition, wherein said detecting means detects input of information on the approximately non-mobile condition, the input performed through said operating means

30 13. The communication system according to Claim 9, wherein said detecting means detects an approximately non-mobile condition by detecting that said communication terminal is loaded onto a fixing apparatus.

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14. The communication system according to Claim 13, wherein said fixing apparatus comprises a station unit connected to a computer and transfers data between said loaded communication terminal and said computer, wherein said communication terminal can be freely
5 attached/detached to/from said fixing apparatus.

15. The communication terminal according to Claim 9, wherein said communication terminal comprises a portable telephone set and said actual data comprises telephone call data.

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